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09/773,393	01/31/2001	Gregory Warren Goodknight	2705-155	4235
20575	7590	07/12/2005	EXAMINER	
MARGER JOHNSON & MCCOLLOM, P.C. 1030 SW MORRISON STREET PORTLAND, OR 97205			MILLS, DONALD L	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/773,393

Applicant(s)

GOODKNIGHT, GREGORY  
WARREN

Examiner

Donald L. Mills

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 and 9-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Thornton et al. (US 6,363,065 B1), hereinafter referred to as Thornton.

Regarding claims 1 and 11, Thornton discloses a voice-over-IP gateway, which comprises:

*A converter operable to receive a packet data stream and to convert the packet data stream to a public switched telephone network data stream* (Referring to Figure 1, the gateway will route the received packets through the PSTN or over the data network, converting the packets for transmission over the circuit switched network when the gateway determines that an auto-switch between the networks is necessary. See column 39, lines 63-67.)

*A controller operable to* (Referring to Figure 2, the gateway utilizes microcontroller 240,):

*Send signals in the public switched telephone network data stream identifying the network device as a packet device* (Referring to Figure 1, packets are transmitted over the

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PSTN after the originating IP based device has its destination IP address translated by the gateway. See column 11, lines 1-4.)

*Receive signals indicating at least one other network devices are participating in a public switched transmission session with the network device* (Referring to Figure 1, the IP destination device receives the call initiation via the gateway. See column 11, lines 1-4.)

*Send the packet data stream across the public switched transmission network directly to the at least one other network device* (Note, the Examiner interprets directly as the exchanging of information between a source and destination without unnecessary re-routing between other devices. Referring to Figure 1, voice data is exchanged by the originating and destination IP devices over the PSTN via the gateways. See column 11, lines 1-4.)

Regarding claim 2, Thornton discloses *the network device as a voice gateway* (Referring to Figure 1, the gateway will route the packets through the PSTN. See column 11, lines 1-4.)

Regarding claim 3, Thornton discloses *the packet data stream further comprising coded voice* (Referring to Figure 1, the packets are encoded voice traffic. See column 10, line 63.)

Regarding claim 4, Thornton discloses *the packet data stream further comprising data* (Referring to Figure 1, the packets are encoded voice traffic. See column 10, line 63.)

Regarding claim 5, Thornton discloses *the converter further comprising a voice coder/decoder* (Referring to Figures 1 and 2, the gateway utilizes a DSP to covert compressed telephony signals. See column 14, lines 22-25.)

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Regarding claim 6, Thornton discloses *the converter further comprising a modem* (Referring to Figures 1 and 2, the gateway inherently acts as a modem by transmitting digital data signals over the analog PSTN.)

Regarding claim 9, Thornton discloses *the controller is a processor configured to execute all the control operations* (Referring to Figure 1, the gateway will route the packets through the PSTN, inherently responsible for executing the call-setup and break-down. See column 11, lines 1-4.)

Regarding claim 10, Thornton discloses *the controller further comprising more than one integrated circuit* (Referring to Figure 2, the gateway utilizes eight separate DSPs 225<sub>1</sub>, ..., 225<sub>8</sub>. See column 14, lines 9-10.)

3. Claims 12, 13, 15, 16, 19, 20, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Brent et al. (US 6,272,358 B1), hereinafter referred to as Brent.

Regarding claims 12 and 21, Brent discloses a vocoder by-pass for digital mobile-to-mobile calls, which comprises:

*Establishing a communication session between a first network device and other devices across a public switched telephone network by transmission of a public switched telephone network data stream* (Referring to Figure 2, a mobile-to-mobile call connection is established across the public switched telephone network via the public switched data stream. See column 2, lines 19-33.)

*Using transmission of identifying signals to identify at least one other network device participating in the communication session as a packet device* (Referring to Figure 2, a mobile-

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to-mobile call connection is established, requiring the identification of the called mobile (packet device) participating in the communication in order to establish mobile-to-mobile communication. See column 2, lines 19-33.)

*Altering the communication session between the first network device and the at least on other network device to transmit a packet data stream eliminating any public switched telephone network conversion prior to call establishment* (Referring to Figure 2, the frame selector alters the communication session between the mobiles via a by-pass function of PCM conversion to transmit the frame over the high-speed data network prior to data transmission (call establishment). See column 2, lines 59-64.)

Regarding claim 13, Brent discloses *dialing out of a packet domain to a public switched telephone network domain* (Referring to Figure 2, calls are switched from the packet switch to the PSTN. See column 2, lines 27-32.)

Regarding claim 15, Brent discloses *eliminating a conversion through a voice coder/decoder* (Referring to Figure 2, the frame selector alters the communication session between the mobiles via a by-pass function of PCM conversion to transmit the frame over the high-speed data network. See column 2, lines 59-64.)

Regarding claim 16, Brent discloses *eliminating a conversion through a modem* (Referring to Figure 2, the frame selector alters the communication session between the mobiles via a by-pass function of PCM conversion to transmit the frame over the high-speed data network. See column 2, lines 59-64.)

Regarding claim 19, Brent discloses *wherein using transmission of identifying signals further comprises the first network device sending the identifying signals* (Referring to Figure 2,

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for mobile-to-mobile communications to occur the source mobile must identify itself to the destination mobile.)

Regarding claim 20, Brent discloses *wherein using transmission of identifying signals further comprises the first network device receiving and responding to identifying signals sent by another network device* (Referring to Figure 2, for mobile-to-mobile communications to occur the source mobile must exchange identity information between itself and the destination mobile.)

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thornton et al. (US 6,363,065 B1), hereinafter referred to as Thornton, in view of Sebestyen (US 5,847,752).

Regarding claim 7 as explained above in the rejection statement of claim 1, Thornton discloses all of the claim limitations of claim 1 (parent claim).

Thornton does not disclose *the controller utilizing ITU V.8 protocols*.

Sebestyen teaches a method for call setup and control of video-telephone communication utilizing the ITU-T V.8 signaling protocol (See column 10, lines 19-24.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the video-telephone communication utilizing ITU-T V.8 signaling protocol of Sebestyen in the system of Thornton. One of ordinary skill in the art would have

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been motivated to do so in order to connect via analog or digital interfaces and maintain sufficient quality of service for the transmission of the signal.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thornton et al. (US 6,363,065 B1), hereinafter referred to as Thornton.

Regarding claim 8 as explained above in the rejection statement of claim 1, Thornton discloses all of the claim limitations of claim 1 (parent claim).

Thornton does not disclose *the controller using robbed-bit signaling*.

Thornton teaches a voice-over-IP telephony gateway which utilizes call independent signaling over conventional H.323 messages.

It would have been obvious choice in design to one of ordinary skill in the art at the time the invention was made to implement robbed-bit signaling in the system of Thornton. One of ordinary skill in the art would have been motivated to do so in order to efficiently utilize the transmission bandwidth for signaling, voice band, and digital data traffic.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brent et al. (US 6,272,358 B1), hereinafter referred to as Brent, in view of Sebestyen (US 5,847,752).

Regarding claim 7 as explained above in the rejection statement of claim 12, Brent discloses all of the claim limitations of claim 12 (parent claim).

Brent does not disclose *the controller utilizing ITU V.8 protocols*.

Sebestyen teaches a method for call setup and control of video-telephone communication utilizing the ITU-T V.8 signaling protocol (See column 10, lines 19-24.)



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It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the video-telephone communication utilizing ITU-T V.8 signaling protocol of Sebestyen in the system of Brent. One of ordinary skill in the art would have been motivated to do so in order to connect via analog or digital interfaces and maintain sufficient quality of service for the transmission of the signal.

8. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brent et al. (US 6,272,358 B1), hereinafter referred to as Brent, in view of Thornton et al. (US 6,363,065 B1), hereinafter referred to as Thornton.

Regarding claim 17 as explained above in the rejection statement of claim 12, Brent discloses all of the claim limitations of claim 12 (parent claim).

Brent does not disclose *gathering information on the at least one other network device and storing the information for future use.*

Thornton teaches gateways, which inherently utilize a routing table that corresponds IP addresses to network devices (See Figures 1 and 2.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the gateways of Thornton in the system of Brent. One ordinary skill in the art at the time of the invention would have been motivated to do so in order to interface multi-protocol networks in a seamless environment. An added benefit of doing so would allow for the integration of current and future technologies.

Regarding claim 18 as explained above in the rejection statement of claim 12, Brent discloses all of the claim limitations of claim 12 (parent claim).

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Brent does not disclose *accessing a storage of known network devices based upon the identifying signals; locating information about the at least one other network device; and using that information in altering the communication session.*

Thornton teaches gateways, which inherently utilizes its internal routing table to correspond IP addresses to network devices in order to resolve IP destination addresses for communication IP based devices when routing data through the data network (See Figures 1 and 2.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the gateways of Thornton in the system of Brent. One ordinary skill in the art at the time of the invention would have been motivated to do so in order to interface multi-protocol networks in a seamless environment. An added benefit of doing so would allow for the integration of current and future technologies.

### ***Response to Arguments***

9. Applicant's arguments regarding claims 1-11 have been fully considered but they are not persuasive.

Rejection Under 35 USC § 102

On page 7 of the remarks, regarding claims 1-6 and 9-11 the Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

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On page 8, of the remarks, regarding claims 1-6 and 9-11 the Applicant argues Thornton does not disclose *sending signals in the public switched telephone network data stream identifying the network device as a packet device*. The Examiner respectfully disagrees. Thornton discloses transmitting packets (which have headers identifying the network device as a packet device) over the PSTN after the originating IP based device has its destination IP address translated by the gateway (See column 11, lines 1-4.) Therefore, Thornton discloses *sending signals in the public switched telephone network data stream identifying the network device as a packet device*.

10. Applicant's arguments with respect to claims 12-21 have been considered but are moot in view of the new grounds of rejection.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Mills whose telephone number is 571-272-3094. The examiner can normally be reached on 8:00 AM to 4:30 PM. .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donald L Mills

*DLM*

July 10, 2005



**JOHN PEZZLO  
PRIMARY EXAMINER**